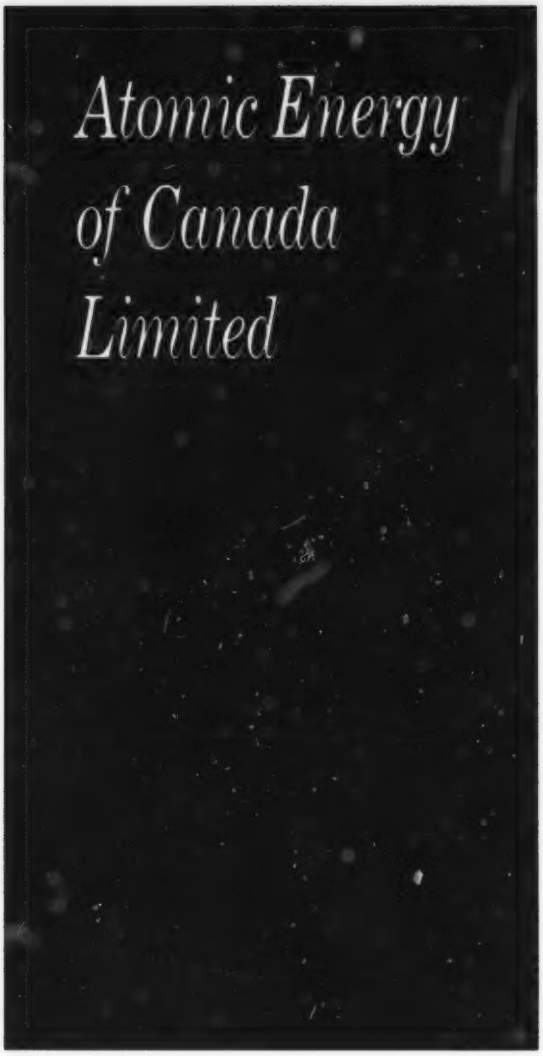


This photo is a computer-generated drawing of the reactor core for the MAPLE-X10 dedicated isotope production facility that will be built at AECL's Chalk River Nuclear Laboratories. The MAPLE-type reactor is ideally suited for research programs and production of isotopes used in industry and medicine.

90-02767/

Letter of Transmittal

The Honourable Marcel Masse, P.C., M.P.
Minister of Energy, Mines and Resources
House of Commons
Ottawa, Ontario

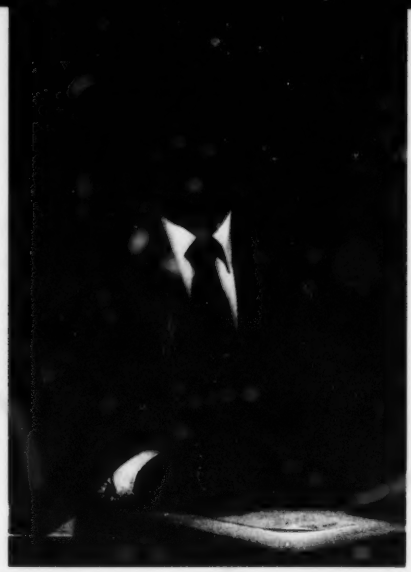
Dear Mr. Masse:

In accordance with subsection 152(1) of the Financial Administration Act, I am pleased to submit the annual report of Atomic Energy of Canada Limited for the fiscal year ended March 31, 1988, together with the financial statements and report of the Auditor General.

The year was marked by a number of accomplishments which have enhanced the corporation's capability to meet the promising but difficult challenges which lie ahead. Much of the groundwork for this phase of AECL's development was laid by my predecessor Robert Després, who served as Chairman of the Board from November 1980 to December 1986. We are appreciative of his services.

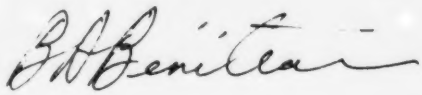
During the year we were fortunate to have five new members join our Board – Michael Burns, Principal, The Sentinel Group, Vancouver; Lois DeGroot, President of Confedco Inc., Toronto; Peter Harris, a partner in the law firm of Perry & Outerbridge, Toronto; David Sellen, senior partner in the law firm of Deeley, Fabbri and Sellen, Winnipeg; and Jean Vacchino, President of Vacchino Holdings Ltd., Montreal.

As my mandate as Chairman and member of the Board will terminate on June 15, 1988, this will be the last Annual Report with which I will be associated. I believe that AECL is very fortunate in that James Donnelly has accepted an additional assignment beyond the term of his current mandate (also June 15, 1988), to participate in an orderly transition to a new senior management team.



AECL's Board of Directors is comprised of strong and dedicated Canadians. As a group, they are looking forward to working closely with the Corporation's shareholder to ensure AECL's future success.

Respectfully submitted,



Basil A. Bénéteau
Chairman of the Board

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Financial Highlights

(millions of dollars)

	1988	1987
Commercial Operations		
Revenue	289	277
Operating Profit	32	22
Net Income	10	17
Parliamentary Appropriations	175	218
Research and Development Operations	243	233

President's Message

This past year, which marked the 35th anniversary of AECL, has again been dominated by debate inside and outside the corporation regarding the reformulation of AECL strategic direction. The value to Canada of AECL's established nuclear programs is unarguable; the long-term need unquestioned. Yet there remains a hesitancy in direction as we develop the right federal and provincial relationships to reflect the appropriate balance of costs and benefits.

The economic advantage in industrial Canada from long-term stable electricity rates due to the foresight of our utility managers is a commonly underscored achievement. Adding nuclear power to the traditional Canadian hydro electric option has allowed Canadians coast to coast to enjoy some of the cheapest electric power in the world. Reports made to the Minister of Energy, Mines and Resources Energy Options task force confirmed that the nuclear option for Canada is too vital to our future to give up.

This does not mean to say that the path ahead is clear and unbroken. The relatively high capital costs of such programs, together with the costs of sustaining the required supporting research and development, make nuclear power an easy target for short-term economies to the detriment of long-term advantage.

Understanding Canadians' needs and wishes in this debate has taxed us considerably. Singing the praises of our technical achievements and ignoring the genuine concerns of the public in matters of safety and environment is clearly not acceptable. In-depth research conducted for the Canadian Nuclear Association confirms two key factors. Most Canadians recognize the strategic role of nuclear power in their future. Almost all, however, wish much more information on the subjects of economics, safety and environmental aspects of nuclear power and other energy options. I believe all concerned, the media, our critics and our supporters, must share the blame for past deficiencies in this area. AECL and other members of the nuclear industry openly accept this challenge by the public for more and better information.

The continuation of Canada's unique electric power option – the CANDU reactor – is the corporation's main objective. Once again the year ended with no new commitments at home or overseas, leaving the corporation for the first time in 10 years with insufficient income to meet future product marketing and development requirements. The growth in electricity demand confounds all but the experienced and sets a challenge to governments and utilities to make the right decisions now for all Canadians at the dawn of the next century. I have no doubt that CANDU will be there and competing in every fashion with fossil and hydraulic alternatives.

CANDU Performance

All operating CANDU units have once again performed to the highest world standards, in Ontario, Quebec, New Brunswick, Korea and Argentina. The retubed Pickering Unit 1 re-entered service and the second unit will follow shortly. The ability to carry out such extensive reactor maintenance in a prescribed program time is another first for CANDU and a great tribute to Ontario Hydro's management and staff.

AECL remains convinced that the CANDU 300 development, as the flagship of our advanced CANDU concept, will provide new opportunities in the domestic and international marketplace. Last year's progress in the pre-project design continues to confirm that significant capital cost reductions are available in this size of plant through enhanced output, advanced control technologies, and improved manufacturing and construction techniques. It is always of some comfort when the international competition is forced away from its traditional stand to play catch-up to our innovation.

At the end of the year, the federal government endorsed our approach to the CANDU 300 and agreed to advance funds to the corporation towards completion of the design, thus confirming their confidence in the future of Canada's nuclear power alternative. The government also asked AECL to act as an advisor to the Department of National Defence on the Nuclear Powered Submarine Acquisition Program.

In spite of setbacks, the enthusiasm in our energy sector remains high. AECL design work is nearing completion on Darlington for Ontario Hydro and on Cernavoda in Romania. Additional work has been developed on a Korean Research Reactor and on a heavy water reactor project in Italy. New initiatives on service work in the United States together with the government support for the CANDU 300 should provide sufficient resources to preserve and enhance our technical capabilities throughout 1988-89.

Research — Our National Commitment

The reorganization of our Research Company activities launched in 1986 has been completed. The newly constituted Program Responsibility Centres have each confirmed the viability of all research and development programs against the long-term requirements of our customers and other publics. Changing the culture of our establishments from the traditionally fully funded government laboratory to one where research funds are a direct product of focused programs and commercial initiatives has been a difficult task. The absolute proof of success from this change is still ahead, but the essential achievements to date are a tribute to the Research Company's management and the new enthusiasm engendered in all our staff.

We appreciate enormously Ontario Hydro's confidence in our research activities expressed by their new financial contributions to reactor safety, nuclear materials and waste management programs. It is the competence of such programs together, of course, with the excellence of AECL's and Ontario Hydro's engineering and the utility's operational management that convinced Dr. Kenneth Hare, Chairman of the Ontario Nuclear Safety Review, to pronounce the Ontario CANDU program safe by any measurable standards.

The thrust for new funding sources remains a challenge. The critical mass feature of big science such as a nuclear power program is now better understood and we welcome and appreciate the federal government's relaxation of the timetable of their very stringent cutbacks to our research efforts to give the corporation time to secure the long-term funding support essential for Canada's nuclear future.

Canada's Lead in Nuclear Medicine

The nuclear medical activities of the Radiochemical Company and the Medical Products Division have continued to excel.

More orders were received and executed for cobalt therapy machines than at any time in the past decade which, with the success of our treatment-planning products put the Medical Products Division in a profitable position from current operations.

Markets hardened for medical isotopes and industrial irradiation products during 1987-88. The extreme dedication, resourcefulness and ingenuity of all staff at the Radiochemical Company were able to meet these challenges and surpassed their targets for income and cash generation.

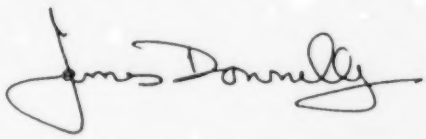
AECL fully supports the government's privatization endeavours for both these divisions. It is clear that the intercorporate synergism that made these businesses so successful will require careful nurturing as new ownership is established. AECL management will work with all parties to ensure the success of this initiative.

Enthusiasm and Resourcefulness of Our Staff

I never cease to be surprised at the enthusiasm and resourcefulness of our staff, given the adversity of these last few years. As I leave this corporation later this year, it is to them that I owe whatever success has been achieved. I have been privileged to follow some great men and women, and work alongside others. Each has contributed enormously to the success of this corporation and ensured what is sometimes under-recognized as a great Canadian achievement. I have worked under the guidance of four corporate chairmen, each distinguished in his own way. The six years with Robert Després (November 1980 to December 1986) saw our greatest achievements as we benefited from his unselfish contribution and wise, experienced advice. These last two years with Basil Bénéteau were an equally rewarding experience. Canada is indebted to all such successful businesspeople who give their valuable time and unqualified efforts, for little reward, to guide the affairs of her Crown corporations.

We must also pay respects to two outstanding engineers, Drs. A.J. Mooradian and G.A. Pon, who recently retired from AECL. They have dedicated their lives to the peaceful applications of nuclear energy and have made remarkable contributions. Their vision, drive and advice will be missed.

In summary, we met our goals for 1987-88, and forecasts for 1988-89 are encouraging. AECL will continue to play a role in ensuring that Canadians will all benefit from the peaceful applications of nuclear energy.



James Donnelly
President and Chief Executive Officer

Research Company

The new structure of the Research Company is now well established and significant progress has been made on its mission to

perform the research, development, demonstration and marketing required to apply nuclear sciences and their associated technologies for the maximum benefit of Canadians.

Major achievements during 1987-88 included:

- The 10 MeV, 1 kW accelerator for radiation applications research was successfully installed and tested at the Whiteshell Nuclear Research Establishment. It will be used in developing technologies for industrial radiation processing, using electron irradiation.
- Progress was made in developing a test to determine the sensitivity of both nuclear workers and the general public to radiation. Early results from this relatively rapid and inexpensive screening assay indicate that an appreciable fraction of the population is significantly more sensitive to certain carcinogens than the majority. This knowledge has potentially important applications to health protection and improved cancer therapy.
- Development of the MAPLE family of light-water research reactors, fuelled with low-enriched uranium, for use as neutron sources and in the production of radioisotopes for medical, industrial and research applications continued through the year. The Korea Advanced Energy Research Institute has decided to use this type of design in building a new research reactor in a joint project with AECL. Negotiations are under way with Colombia concerning the upgrading of their research reactor to a MAPLE.
- Operation of the Tokamak de Varennes fusion test facility near Montreal was successfully achieved. The facility will provide important scientific information in the fusion field as well as helping to ensure Canadian access to developments in this technology. This project is a joint effort of the Research Company, Hydro Quebec and the INRS (Institut national de la recherche scientifique) which is associated with the Université du Québec.

To assist in the commercial exploitation of its research and to encourage the development of new businesses, the Research Company organized a special conference called "Partnerships for Profit" at its Chalk River site. Senior executives of Canadian corporations were introduced to the Research Company's technologies and to potential investment opportunities. One of these opportunities, the Bubble Technology Unit, has since been established as an off-site business, having attracted investment from the venture capital community. Other technologies are approaching spin-off and many more are in the various earlier stages of business assessment and development. This process will be aided by the New Ventures Branch, which has been established to nurture and accelerate the launching of specific business opportunities.

The choice of programs and the level of support for new business initiatives is monitored by a Program Evaluation Process. Additional input into the assessment of Research Company programs comes from external peer reviews, advisory committees, consultants and joint customer/AECL working parties.

Technical achievements during the year included the completion and commissioning of the Tritium Extraction Plant. This plant will provide tritium for applications such as safety lighting, as well as de-tritiating AECL heavy water and proving the effectiveness of the wet-proofed catalyst under plant operating conditions. Construction of the Intrusion Resistant Underground System (IRUS) for disposal of low-level radioactive waste has begun; IRUS will be the first such disposal facility in Canada. Cooperation with universities and other agencies was increased through a proposal, which was submitted to funding agencies in three countries, for the

Sudbury Neutrino Observatory, a multinational physics research effort.

A 25-year-old Zircaloy pressure tube was taken for inspection from the Nuclear Power Demonstration reactor in Rolphton, Ontario. Analysis showed that we could no longer be sure of an adequate warning of any impending pressure-tube failure. Since the primary objectives for the reactor had been met, and repair would not have been economical, a decision was made to shut it down after 25 years of admirable service.

The scientists and engineers of the Research Company will continue to build on the achievements of the past year and reach for new targets in 1988-89.

- The reservoir of technology developed at the laboratories will continue to be expanded and drawn upon. From this base, opportunities for new businesses which can be spun out as separate operating units will continue to be exploited.
- Development, in cooperation with CANDU Operations, to improve the cost, safety and reliability of the CANDU reactor will be emphasized in recognition of the importance of preserving the CANDU option and keeping it competitive.
- The base of the Research Company's role as a national laboratory will be broadened by an expanded input into program selection, by increased support from universities and other agencies, and by progress towards establishing Institutes of Toxicology, Heavy-Ion Physics and Condensed Matter Physics.
- The SLOWPOKE Demonstration Reactor at Whiteshell laboratory is progressing towards full-power operation. Emphasis will be placed in the coming year on pursuing opportunities for the next phase, a commercial demonstration.

Linda Patterson, a research technologist in the Research Company's Radiation Biology Branch, carries out an analysis of blood cells as part of a cancer proneness screening test. The test procedure measures a person's sensitivity to cancer-causing agents, and will facilitate significant improvements in cancer treatment and occupational health protection.

CANDU Operations

CANDU Operations, in addition to its traditional role of providing engineering and procurement services to nuclear power

stations under construction and technical services to operating plants, continued to expand its engineering services business in the non-CANDU nuclear sector, as well as in other fields where the unique experience and expertise which has evolved in Canadian nuclear engineering can be beneficial.

Despite the constraints imposed by lack of new CANDU orders, increased emphasis on the development of the CANDU 300 and on new engineering services business sustained the buoyancy of the organization and minimized staff reductions.

CANDU 300 standard product design activities were carried out by a team of 115 senior experienced engineers, assisted by Canadian consultants and manufacturers. We believe that the CANDU 300 standard concept will be a winner in the international power reactor market. Because of its standard design features, construction can be achieved in 38 months or less from the first concrete to in-service operation, as opposed to the 76 months of current designs. It is therefore receiving high priority.

In 1987, CANDU Operations also started the Advanced CANDU Program. Working from the building blocks of basic research and development programs in AECL's Research Company, from the CANDU 300 initiative, and from generic technology development, this program is aimed at developing an advanced product in the 700-1000 MWe range for the 1990s. The specific objectives are to develop an enhanced design, offering a low cost, short schedule, high capacity factor, additional safety features, and the use of enriched fuel thereby reducing the already low fuelling cost of CANDU.

CANDU Operations also is developing an advanced CANDU design for Japan's Electric Power Development Company (EPDC). The second year of the current three-year program of technical and economic studies on the introduction of CANDU into Japan has been completed. EPDC is exploring the CANDU for possible inclusion in its nuclear portfolio when technical, economic and other conditions, such as siting and energy demand, are met.

Construction of the five-unit Cernavoda station in Romania continued. The reactor building for unit 5 was poured at year-end. Ninety-five per cent of the equipment ordered from Canada has been delivered. This year's deliveries included control computers from CAE, feeder piping from Combustion Engineering, valves from Jamesbury, Velan and other manufacturers, and diesel generators from Atlas Polar. Canadian equipment for units 1 and 2 is valued at more than $300 million. Twenty Canadians are stationed in Romania, providing technical assistance to the client for engineering, procurement, quality assurance and construction.

Decommissioning of the Douglas Point station in Ontario was completed during the year and its spent fuel was safely stored at the site in above-ground concrete silos occupying a surface area about the size of a hockey rink.

Unit 1 of the Pickering generating station re-entered commercial service in October 1987, after replacement of all of its pressure tubes. This was a demonstration of the unique CANDU feature which allows full transplant of the heart of the reactor. In collaboration with the Research Company and Ontario Hydro, CANDU Operations is devoting considerable resources to improving the longevity of pressure tubes, and these programs are being intensified.

Related projects in which CANDU Operations made considerable progress during the year were Spacer Location and Repositioning (SLAR) and Large Scale Fuel Channel Replacement (LSFCR). SLAR involves development of tooling for repositioning the spacers which separates each pressure tube from its calandria tube. Acceptance testing of the SLAR delivery system for Pickering was completed in AECL's Sheridan Park Engineering Laboratory. For the LSFCR program, CANDU Operations has contributed 275 person-years to the development of fuel channel installation tooling for the retubing of Pickering units 1 and 2. The techniques and tools developed will enable future replacements to be made in significantly less time.

Continuing work on reactor safety analysis has included postulation of severe accidents and the results have been presented at recent technical conferences of the International Atomic

Energy Agency. Safety has been foremost from the beginnings of CANDU, and it was not surprising that a recent in-depth study by the Ontario Nuclear Safety Review, like earlier detailed examinations, pronounced CANDU safe.

Operational performance of all CANDUs in service was excellent and, as a result, little opportunity emerged for maintenance and service business for AECL.

Efforts continued to make available the company's engineering expertise in the non-CANDU sector. Work progressed well on the Italian CIRENE and the Indonesian BATAN projects, with CANDU Operations providing a variety of engineering services and equipment. CANDU Operations and the Research Company were jointly successful in obtaining a contract from the Korea Advanced Energy Research Institute (KAERI) for the supply of specific components and services for a Korean Multi-purpose Research Reactor (KMRR). CANDU Operations also was successful in entering the U.S. LWR (Light Water Reactor) market through contracts for the supply of a digital feedwater control system to Philadelphia Electric Company and a digital system for the mitigation of power transients without scram to Carolina Power and Light. Both systems were based on technology developed originally for CANDU. A contract was obtained for engineering and repair work of a reactor vessel nozzle on a BWR (Boiling Water Reactor) in Finland, and marketing efforts for LWR services work were conducted in a number of other European countries.

In the non-nuclear sector, CANDU Operations continued development and marketing of a variety of robotic systems. As well, operations procedures and reliability studies – again, based on technology developed for CANDU – were successfully developed and applied in the evaluation of petrochemical plants and aluminum smelters.

Marketing and sales activities continued at an appropriate level to match the expected need for nuclear power in selected domestic and international markets. CANDU Operations continued to maintain offices in Korea, The Netherlands, Yugoslavia, Turkey, Romania, and the United States. In response to a request from Indonesia, AECL submitted a preliminary examination explaining how a nuclear power plant might be acquired under the Build, Own, Operate and Transfer (BOOT) model. To internationalize CANDU and in anticipation of such a future potential introduction of CANDU into Indonesia, a memorandum of understanding was signed with the Japanese companies Marubeni and Hitachi for joint collaboration. Negotiations commenced for a contract which would develop a CANDU localization program in Egypt.

Computer-aided design and drafting systems are used by CANDU Operations staff Anne Haller and Al Guerrero to reproduce a three-dimensional model of the CANDU 300 nuclear generating station.

Radiochemical Company

The Radiochemical Company develops, produces and sells isotopes and related equipment for the international health care market. Its customers include companies and institutions with medical diagnostic interests and industrial radiation processing requirements.

The Radiochemical Company recorded very satisfactory achievements in 1987-88. In October 1987, the Honourable Pat Carney, Minister for International Trade, presented the Radiochemical Company with the 1987 Canada Export Award, in honour of the company's outstanding export performance. Ninety-three per cent of the Radiochemical Company's revenues are generated by sales outside Canada.

The Isotope Division strengthened its on-going business by signing a long-term radioisotope supply agreement with a major U.S. customer. This order is the largest ever negotiated by the Radiochemical Company. Additionally, long-term molybdenum-99 contracts were finalized with two other major customers. These contracts ensure the Radiochemical Company will maintain its position as the world's dominant molybdenum-99 supplier.

In September 1987, the Radiochemical Company received a Canada Award for Business Excellence for innovation and achievement in the development and commercialization of high purity iodine-123 for medical diagnostic applications. The Isotope Division also negotiated the sale of three iodine-123 production packages, two to Japan and one to the United States. Customer demand for cyclotron isotopes, particularly iodine-123, has grown to the point where the company's current Vancouver-based cyclotron facility has reached production capacity. To address this situation, the company intends to expand its capacity in the near future.

This past year, the Industrial Irradiation Division also booked significant orders. One cobalt-60 sale to a major customer represents the largest single cobalt-60 order ever received by the Radiochemical Company. Similarly, the sale of a sterilization irradiator to a major U.S. manufacturer of disposable medical products will result in the largest cobalt-60 irradiator ever built. Other sales included large cobalt-60 sterilization irradiators destined for Pakistan, England and Germany. The division also completed the installation of sterilization irradiators in Japan and Korea.

During the year, the Radiochemical Company finalized contracts and started work on a food irradiation demonstration facility and technology transfer program for the Government of the Kingdom of Thailand, Office of Atomic Energy of Peace. This project is a milestone for the Radiochemical Company in that it is a multi-faceted agreement between the Radiochemical Company, the Canadian International Development Agency (CIDA) and the Royal Kingdom of Thailand. It involves the supply and installation of a cobalt-60 demonstration food irradiation facility, extensive customer training and market trials of Thai foods.

The sale of a food irradiation plant for Côte d'Ivoire was also concluded. This African country will be irradiating one of its staple products — yams — to inhibit sprouting.

The Canadian Irradiation Centre (CIC), a joint venture between the Radiochemical Company and L'Institut Armand-Frappier, was officially opened in May 1987. The Centre's objectives are to develop, demonstrate and promote radiation processing technology and its diverse applications, including food irradiation. This past year, the CIC achieved international recognition as the only state-of-the-art facility of its kind in the world. It is now endorsed, promoted and supported by the International Atomic Energy Agency, the World Health Organization, and the Food and Agricultural Organization of the United Nations. Hundreds of international food and industry professionals have travelled to it in order to attend its courses and view the

facility. Its calendar is almost totally booked for the radiation processing and food irradiation courses it is offering this year.

In June, the Radiochemical Company sponsored and hosted the 6th International Meeting on Radiation Processing. This biennial conference was attended by over 400 participants from 45 countries. It is the principal international forum for the exchange of information on the science and technology of radiation processing.

The year 1987-88 was successful for the Radiochemical Company and trends in major market areas such as radiation processing are considered favourable for future business growth.

Yves Doyle and Jeannot Proulx verify the exposure report at the control console of the commercial irradiator located at the Canadian Irradiation Centre in Laval, Quebec. The Centre is a joint venture between the Radiochemical Company and l'Institut Armand-Frappier.

Medical Products Division

The Medical Products Division develops, manufactures and markets cancer therapy and treatment-planning equipment. Its customers are supported by a world-wide parts and service network, including direct operations in the United States.

The development of a participative management style has continued and has made a major contribution to the Division's profit improvement. This success story has been published, and presented at Quality of Work Life conferences in the U.S. and Canada. As a result of the cooperative spirit between all employees in this Division, a milestone was achieved this year with the first payment of profit sharing to all Division staff.

During 1987-88, shipments of cobalt therapy machines and computer products increased by 36 per cent and service revenue increased by 20 per cent over the previous year.

A new product, CT-SIM, was introduced during the year and the first order has been booked. This product, which is a CT scanner, specially modified to be used by radiotherapy departments instead of a conventional therapy simulator is a joint project with the U.S. company MHTI and combines their CT scanner technology with the division's well-known THERAPLAN system.

Talks continued with major Indian companies for a joint venture technology transfer for the local manufacture of AECL cobalt units for the Indian market.

Considerable effort was applied during the year on a quality audit for the Therac 25 linear accelerators in order to ensure customers can continue to operate these machines throughout their useful service life. Experts from CANDU Operations and the Research Company played a major role in the detailed analysis.

The Future

RESEARCH AND DEVELOPMENT

AECL's Research Company continues to be the national centre in the disciplines associated with nuclear energy – from research in pure physics through chemistry and metallurgy to engineering. It has made contributions to Canadian society through providing the basis for Canada's own nuclear reactor system and by the production of radioisotopes essential for medicine. Efforts in support of enhanced products in these areas will continue. The traditional excellence in science will be maintained and efforts to exploit scientific discoveries and spin them off into the marketplace will be increased. Research Company scientists and engineers now offer their expertise and skills on a commercial basis to assist industry and government.

The laboratories of the Research Company provide a national resource for the development of high technology which is essential to the future; both in the nuclear industry and for non-nuclear applications of technology that benefit other areas of Canadian life.

CANDU OPERATIONS

From recent studies by CANDU Operations, there has emerged a "Vision" for the next 30 years, the second phase of CANDU commercialization. Even in a very low market scenario, under the most restrictive conditions, CANDU market share can be increased with a significant revenue earning potential over the next three decades. The underpinning of the program will be collaborative ventures that must be pursued domestically and internationally, and will involve Canadian utilities, project management and manufacturing companies, as well as international

partnerships. The new thrust towards standardization and replication, along with its established supremacy as a reactor system, will enable CANDU's high potential as an energy option to be realized.

RADIOCHEMICAL COMPANY

To preserve and strengthen the Radiochemical Company's leadership position in an increasingly competitive international market, the company places on-going emphasis on business and market development strategies and thorough market assessment. Promising new products under development include several iodine-123 diagnostic labelled compounds and yttrium-90 microspheres for treatment of liver cancer. Clinical trials of these yttrium-90 microspheres were conducted this year in the United States and Canada. Developments of this kind allow us to exploit our expertise in areas where we can be competitive and ultimately achieve above-average returns.

MEDICAL PRODUCTS DIVISION

Having completed the first stage of its transition to profitability, the Division will devote more attention to strategic planning and business development to ensure future growth.

A dedicated ongoing development program will ensure that the Division's computer-based radiotherapy treatment planning equipment continues to be a world leader in terms of accuracy and compatibility with all modes of treatment. Market programs coupled with improved product features will enhance the position of cobalt therapy as a modern and economical alternative to low-energy accelerators.

The manufacturing arm of the Division will continue to supply products for its own use as well as for the Radiochemical Company and will expand its activities as a competitive precision supplier to industry.

Guy Barette, a skilled machinist with AECL's Medical Products Division, works on a computer-controlled machining centre. The Division manufactures cobalt therapy and treatment planning equipment.

Financial Review

The 1987–88 year saw a decline in earnings by comparison both with previous year and with expectations in our Corporate Plan. Both comparisons reflect a significantly higher level of net unfunded costs in research and development operations, partly offset by increased earnings from commercial operations.

Consolidated net income was $10.4 million, $7.2 million less than 1987. Operating profit (commercial earnings before covering the net expenses of research and development) increased to $32.2 million from $22.4 million in 1987. Higher earnings from the Radiochemical Company and an improvement in cost effectiveness in the CANDU project sector contributed importantly to this result.

In CANDU Operations, pre-project engineering work continued on the development of the CANDU 300 power reactor. A four-year program was established for the completion of this product design activity, with a first-year investment of $16.4 million in 1987–88. Federal government funding support for the program to the extent of $28 million has recently been committed and this is expected to increase substantially during the coming year. Pending receipt in 1988–89 of the funds already authorized and clarification of future funding arrangements, this year's investment is being carried as a current asset in our balance sheet.

In the Research Company, activities were affected by the continuation of scheduled reductions in federal funding. Despite good progress in expanding the participation of program beneficiaries in the funding of nuclear research and in generating a growing volume of commercial work within the R&D organization, revenues from both these sources were below requirements. This situation was recognized early in the year but management and the Board concluded that cost restraint measures already adopted should not be further expanded to the extent of affecting the core R&D programs. Consequently, research and development operations generated a charge of $21.9 million against consolidated earnings, $17 million higher than in the previous year.

COMMERCIAL OPERATIONS

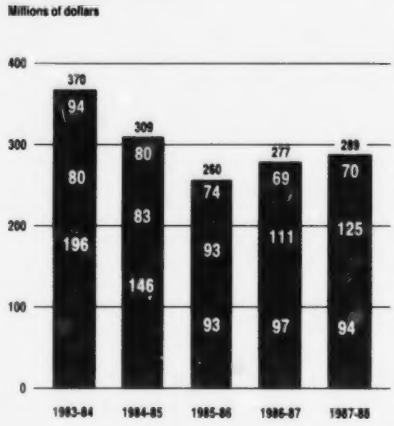
Consolidated revenue rose 4 per cent this year to $289 million, the highest level since 1985.

Nuclear supply and services contributed $94 million towards this total, slightly lower than the amount reported in 1987. In the face of another year without a new reactor order, it is encouraging that the efforts of recent years to pursue smaller scope nuclear engineering continue to bear fruit.

Radiation equipment and isotopes sales grew by 12 per cent to $125 million. Within this product group, revenue generated by the Radiochemical Company increased by 7 per cent over the previous year. This reflects a 22 per cent increase in sales of isotope products to $39 million, partly offset by a decrease of 2 per cent in the sale of industrial irradiation products to $52 million, a level that is still more than double the amount reported three years ago. Despite a slower growth in revenue, the Radiochemical Company, with a 10 per cent increase in earnings over last year, continued to play an important role in AECL's financial performance. The federal government's decision to privatize this division, when implemented, will have a significant impact on the corporation's total earnings and cash generation. Sales of therapeutic equipment and accessory product lines by the Medical Products Division grew strongly to $34 million, an increase of 31 per cent from 1987.

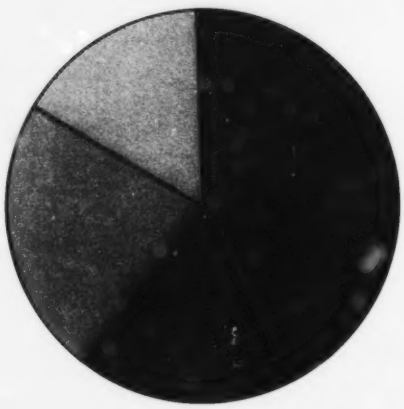
Ontario Hydro's Pickering Reactor Unit 1 was back in service in mid-year after a prolonged shutdown for retubing. Unit 2 remained shut down but is scheduled to return to service during calendar 1988. However, revenue from the corporation's investment in these units is now not expected to resume until 1989–90 due to the current depressed level of coal prices, an important factor in the payback calculation.

Commercial Revenue



- Nuclear Supply and Services
- Radiation Equipment and Isotopes
- Interest and Investment

Commercial Revenue by Geographical Area



- Canada (38%)
- United States of America (23%)
- Far East (14%)
- South America (9%)
- Other (16%)

Financial Review

Research and Development Operations

In 1988, federal funding for these operations was reduced by $28 million to $154 million from $182 million in 1987. This represents the third tranche of a total five-year cutback of $100 million announced by the federal government in the May 1985 budget. The aggregate reduction to the end of 1987–88 amounted to $60 million (1985 dollars). This has been largely absorbed through improved cost and operational efficiencies, through replacement funding from R&D beneficiaries and through increasing R&D contract revenue. The ratio of parliamentary appropriations to total expenses has decreased from 87 per cent in 1985 to 63 per cent in 1988.

With respect to the $40-million balance of the federal funding reduction, agreement has been reached with the government that the $25-million cut that was to have been implemented in 1988–89 will be stretched out to reduce its impact in this coming year. Notwithstanding the diminished federal funding, total expenses increased by $10 million to $243 million compared with $233 million in 1987. This level of activity reflected not only the growing volume of fully commercial business undertaken by the Research Company but also an increase in cost-shared R&D work, mainly from Canadian provincial utilities with nuclear generating facilities.

Capital spending on property, plant and equipment, which is included in total research and development expenses, amounted to $22 million, an increase of $2 million from the previous year. This was largely related to replacement of existing equipment.

Discontinued Operations

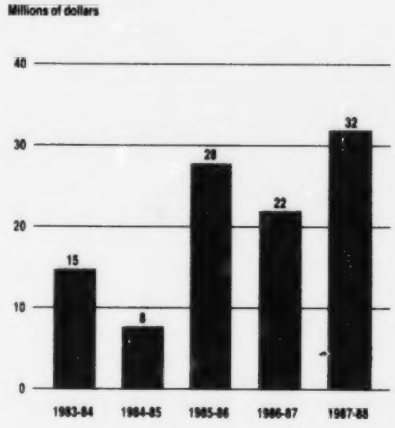
The Nuclear Power Demonstration reactor at Rolphton, Ontario, was shut down in May 1987 after 25 years of service and activities commenced to place the reactor in a safe storage mode. The Gentilly 1 and Douglas Point prototype reactors are now on a safekeeping basis, as well as the two Cape Breton heavy water plants. Total discontinued operation costs in the year, including $11 million for the Nuclear Power Demonstration reactor decommissioning program, amounted to $23 million, a reduction of $13 million from the previous year. These costs are funded by parliamentary appropriations and recoveries from asset sales.

Changes in Financial Position

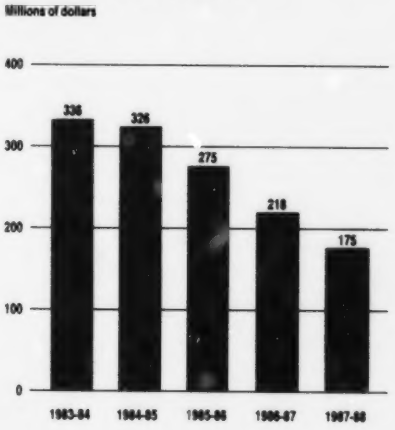
The corporation's financial position, as measured by its cash and short-term deposits, has changed very little during the year. Cash generated from operations, after applying $9.9 million to increased working capital, was $6.9 million. This was some $4 million less than in the previous year, largely reflecting the lower net income. New investment in commercial fixed assets and deferred costs, after deduction of proceeds from disposals, was $3.6 million, compared with $9.2 million in 1987. Financing activities, as in 1987, had little net impact on the cash position.

Overall, cash flow was positive by $2.2 million, the same result as was achieved in the previous year. This left our year-end cash position at $60 million, a level with which we can feel comfortable for the coming year. Beyond 1988–89, however, AECL's financial position remains uncertain pending, in particular, clarification with the federal government of arrangements relating to the funding of the full CANDU 300 design program and to the privatization of the Radiochemical Company.

Operating Profit



Parliamentary Appropriations



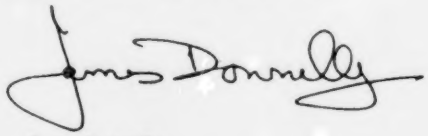
Management Responsibility

The financial statements and all other information presented in this annual report are the responsibility of the management and the Board of Directors of the corporation. The financial statements have been prepared in accordance with generally accepted accounting principles and include estimates based on the experience and judgement of management.

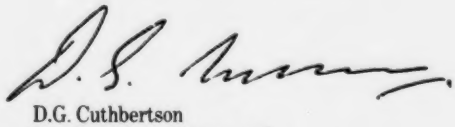
The corporation maintains books of account, financial and management control, and information systems, together with management practices designed to provide reasonable assurance that reliable and accurate financial information is available on a timely basis, that assets are safeguarded and controlled, that resources are managed economically and efficiently in the attainment of corporate objectives, that operations are carried out effectively and that transactions are in accordance with Part XII of the Financial Administration Act and its regulations, as well as the charter, the by-laws and policies of the corporation. The corporation has met all reporting requirements established by the Financial Administration Act, including submission of a corporate plan, an operating budget, a capital budget, and this annual report.

The corporation's internal auditor has the responsibility for assessing the management systems and practices of the corporation. The Auditor General of Canada conducts an independent examination of the financial statements of the corporation and reports on his examination to the Minister of Energy, Mines and Resources.

The Board of Directors' Audit Committee, composed of directors who are not employees of the corporation, reviews and advises the Board on the financial statements, the Auditor General's reports thereto and the plans and reports related to special examinations, and oversees the activities of internal audit. The Audit Committee meets with management, the internal auditor and the Auditor General on a regular basis.



James Donnelly
President and Chief Executive Officer



D.G. Cuthbertson
Vice-President, Finance and
Chief Financial Officer

Auditor's Report

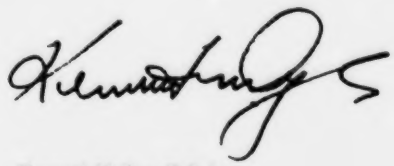
To the Minister of Energy, Mines and Resources

I have examined the balance sheet of Atomic Energy of Canada Limited as at March 31, 1988 and the statements of income, contributed capital, retained earnings and changes in financial position for the year then ended. My examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as I considered necessary in the circumstances.

As explained in Note 3, the corporation has recorded a current asset of $16.4 million on the balance sheet at March 31, 1988 related to the CANDU 300 power reactor program. The effect of this treatment is that the corporation has deferred pre-project costs incurred during the year in anticipation of government funding. The recoverability of these costs from the government is not assured because parliamentary appropriations have not been approved to reimburse the $16.4 million costs already incurred. In these circumstances, generally accepted accounting principles require that these costs be expensed. Had these costs been expensed in the current year, net income for the year and retained earnings at the end of the year would have been reduced by $16.4 million, resulting in a net loss of $6.0 million for the year.

In my opinion, except for the effects of the corporation's decision not to expense the CANDU 300 pre-project costs referred to in the preceding paragraph, these financial statements present fairly the financial position of the corporation as at March 31, 1988 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Further, in my opinion, the transactions of the corporation that have come to my notice during my examination of the financial statements have, in all significant respects, been in accordance with Part XII of the Financial Administration Act and regulations, the charter and the by-laws of the corporation.



Kenneth M. Dye, F.C.A.
Auditor General of Canada

Ottawa, Canada
May 6, 1988

Summary of Significant Accounting Policies

These financial statements have been prepared in accordance with generally accepted accounting principles applied on a consistent basis. The most significant accounting policies are summarized below:

Foreign Currency Translation

Transactions denominated in a foreign currency are translated into Canadian dollars at the exchange rate in effect at the date of the transaction, except those covered by forward exchange contracts, where the rate established by the terms of the contract is used. Monetary assets and liabilities outstanding at the balance sheet date are adjusted to reflect the exchange rate in effect at that date. Exchange gains and losses arising from the translation of foreign currencies are included in income.

Inventories

Radiation equipment and materials are valued at the lower of average cost and net realizable value. Maintenance and general supplies are valued at cost. Heavy water is valued at the lower of average cost, less related parliamentary appropriations, and net realizable value.

Investment and Deferred Costs

Investment and deferred costs are recorded at cost and charged to the revenue derived therefrom over the expected period of revenue generation.

Property, Plant and Equipment

Property, plant and equipment of a research and development nature are recorded at cost and expensed in the year of acquisition.

Other property, plant and equipment are recorded at cost and depreciated on a straight-line basis over the estimated useful life of the asset as follows:

Machinery and equipment	- 3 to 20 years
Buildings	- 20 to 50 years

Costs of decommissioning nuclear facilities are expensed when incurred.

Long-term Contracts

Revenue and costs on long-term contracts are accounted for by the percentage of completion method, applied on a conservative basis to recognize the absence of certainty on these contracts. Full provision is made for all estimated losses to completion of contracts in progress.

Parliamentary Appropriations

The Government of Canada, through parliamentary appropriations, funds certain operations of the corporation as outlined in Note 2. The parliamentary appropriations are offset against the applicable expenditures except for the portion used to discharge certain loan principal which is recognized as an increase in contributed capital.

Pension Plan

Employees are covered by the Public Service Superannuation Plan administered by the Government of Canada. The corporation's contributions to the Plan are limited to an amount equal to the employees' contributions on account of current service. These contributions represent the total pension obligations of the corporation and are charged to income on a current basis.

Employee Termination Benefits

Employees are entitled to specific termination benefits as provided for under collective agreements and conditions of employment. The liability for these benefits is charged to income as benefits accrue to the employees.

Statement of Income

For the year ended March 31, 1988
(thousands of dollars)

	1988	1987
Commercial operations		
Revenue		
Nuclear supply and services	$ 94,203	$ 96,796
Radiation equipment and isotopes	125,223	111,408
Interest on long term receivables	64,382	63,355
Interest on short term deposits	5,662	5,965
	289,470	277,524
Costs and expenses		
Cost of sales and services	135,008	123,538
Product development	14,561	18,224
Marketing and administration	51,378	55,034
Interest on long term debt	56,311	58,303
	257,258	255,099
Operating profit	32,212	22,425
Research and development operations		
Expenses	242,792	232,902
Less: Revenue	67,240	46,339
Parliamentary appropriations *(Note 2)*	153,700	181,737
Net expenses	21,852	4,826
Discontinued operations		
Expenses	22,953	36,397
Less: Parliamentary appropriations *(Note 2)*	20,342	34,588
Recovery from asset sales	2,611	1,809
	—	—
Net income	$ 10,360	$ 17,599

Balance Sheet

As at March 31, 1988
(thousands of dollars)

	1988	1987
ASSETS		
Current		
Cash and short term deposits	$ 59,950	$ 57,701
Accounts receivable	168,048	142,182
CANDU 300 pre project costs *(Note 3)*	16,410	—
Inventories *(Note 4)*	58,412	49,942
	302,820	249,825
Heavy water inventory *(Note 4)*	9,488	9,653
Long-term receivables *(Note 5)*	567,541	597,378
Investment and deferred costs *(Note 6)*	106,104	107,652
Property, plant and equipment *(Note 7)*	50,311	53,607
	$1,036,264	$1,018,115
LIABILITIES		
Current		
Accounts payable and accrued liabilities	$ 136,576	$ 130,607
Current portion of long term debt	28,214	26,353
	164,790	156,960
Deferred revenue	28,465	8,579
Accrued employee termination benefits	41,289	34,370
Long-term debt *(Note 8)*	594,332	622,545
	828,876	822,454
SHAREHOLDER'S EQUITY		
Capital stock		
Authorized — 75,000 common shares		
Issued — 54,000 common shares	15,000	15,000
Contributed capital	72,418	71,051
Retained earnings	119,970	109,610
	207,388	195,661
	$1,036,264	$1,018,115

Approved by the Board

B. A. Bénéteau, Director

James Donnelly, Director

Statement of Contributed Capital

For the year ended March 31, 1988
(thousands of dollars)

	1988	1987
Balance at beginning of the year	$ 71,051	$ 69,795
Parliamentary appropriations for loan principal repayment	1,367	1,256
Balance at end of the year	$ 72,418	$ 71,051

Statement of Retained Earnings

For the year ended March 31, 1988
(thousands of dollars)

	1988	1987
Balance at beginning of the year	$109,610	$ 92,011
Net income	10,360	17,599
Balance at end of the year	$119,970	$109,610

Statement of Changes in Financial Position

For the year ended March 31, 1988
(thousands of dollars)

	1988	1987
Operating activities		
Net income	$ 10,360	$ 17,599
Depreciation and amortization	6,427	6,822
	16,787	24,421
Increase in operating working capital	(9,892)	(13,444)
Cash from operations	6,895	10,977
Investing activities		
Acquisition of commercial property, plant and equipment net of disposal	(3,009)	(7,438)
Increase in deferred costs	(606)	(1,758)
Cash invested	(3,615)	(9,196)
Financing activities		
Repayment of long-term debt	(26,352)	(24,171)
Proceeds from long-term notes receivable	23,954	23,340
Parliamentary appropriations for loan principal repayment	1,367	1,256
Cash from (used in) financing	(1,031)	425
Increase in cash and short-term deposits	2,249	2,206
Cash and short-term deposits at beginning of the year	57,701	55,495
Cash and short-term deposits at end of the year	$ 59,950	$ 57,701

Notes to the Financial Statements

For the year ended March 31, 1988

1. Accounting policies

The summary of significant accounting policies is an integral part of these financial statements.

2. Parliamentary appropriations

Parliamentary appropriations were used during the year for the following purposes:

	1988	1987
	(thousands of dollars)	
Research and development operations	$ 153,700	$ 181,737
Discontinued operations		
• Prototype reactors	15,223	11,855
• Heavy water plant closures	2,639	18,839
• LaPrade plant protection	547	1,850
• Heavy water plant loan interest	1,933	2,044
	20,342	34,588
Heavy water plant loan principal	1,367	1,256
	$ 175,409	$ 217,581

3. CANDU 300 pre-project costs

During the year, the corporation invested $16.4 million in initial expenditure on a four-year program, currently estimated to cost $109 million in total, for the pre-project detail engineering of a CANDU 300 power reactor. The Cabinet has so far authorized the provision of $28 million in federal funding for this program. Pending receipt of these funds in the 1988–89 fiscal year, the $16.4 million costs so far incurred are being carried as a current asset in the balance sheet. Additional government funding has been requested and is awaiting approval.

4. Inventories

	1988	1987
	(thousands of dollars)	
Current		
Radiation equipment and materials	$ 54,247	$ 44,916
Maintenance and general supplies	4,165	5,026
	$ 58,412	$ 49,942
Heavy Water	$ 555,953	$ 564,440
Less: Parliamentary appropriations	546,465	554,787
	$ 9,488	$ 9,653

Parliamentary appropriations for heavy water are repayable to the government, together with interest thereon, to the extent of future revenue from sales of related heavy water. Accrued liabilities as at March 31, 1988 include $6.7 million in respect of net proceeds from sales during the year.

Notes to the Financial Statements

5. Long-term receivables

	1988	1987
	(thousands of dollars)	
Notes receivable from provincial utilities in respect of the financing of nuclear facilities (refer to Note 8 for related debt)	$ 576,265	$ 600,219
Contract receivables maturing through 1995	32,941	34,069
Mortgages receivable and other	4,103	5,523
	613,309	639,811
Current portion	45,768	42,433
	$ 567,541	$ 597,378

6. Investment and deferred costs

	1988	1987
	(thousands of dollars)	
Investment in Pickering 1 and 2		
The corporation, Ontario Hydro and the Province of Ontario are parties to an agreement for the construction and operation of Units 1 and 2 of the Pickering 'A' nuclear generating station, with ownership of these Units being vested in Ontario Hydro. Under the agreement, the corporation is entitled to receive payments until the year 2003 based on the net operational advantage of the power generated by Pickering Units 1 and 2 as compared with the coal-fired Lambton Units 1 and 2.	$ 84,012	$ 84,012
Deferred costs		
Costs incurred in modifying non-corporation owned facilities for revenue-producing purposes and other deferred costs.	22,092	23,640
	$ 106,104	$ 107,652

Pickering Unit 1 returned to service in October 1987 after a prolonged shutdown for pressure tube replacements. Unit 2 remains shut down for the same purpose and is scheduled to be returned to service in calendar 1988. As a result of the shutdowns, the corporation did not earn any revenue on its investment during 1987 and 1988, and accordingly no amortization of the investment was charged in either year.

Amortization of deferred costs for the year amounted to $1.4 million (1987 – $1.5 million).

Notes to the Financial Statements

7. Property, plant and equipment

	1988			1987
	Cost	Government funding and accumulated depreciation	Net	Net
	(thousands of dollars)			
Commercial operations				
Land and improvements	$ 2,430	$ 1,109	$ 1,321	$ 1,352
Buildings	46,025	17,853	28,172	29,409
Machinery and equipment	40,332	22,134	18,198	20,114
	88,787	41,096	47,691	50,875
Research and development operations				
Land and improvements	11,537	11,537	—	—
Buildings	80,303	77,683	2,620	2,732
Reactors and equipment	219,000	219,000	—	—
Construction in progress	41,296	41,296	—	—
	352,136	349,516	2,620	2,732
Discontinued operations				
Prototype reactors	215,708	215,708	—	—
Heavy water plants	802,777	802,777	—	—
	$ 1,459,408	$ 1,409,097	$ 50,311	$ 53,607

Depreciation of commercial property, plant and equipment for the year ended March 31, 1988, amounted to $5.0 million (1987 – $5.3 million).

Research and development property, plant and equipment expensed during the year amounted to $22.0 million (1987 – $20.1 million).

The decommissioning of nuclear research and prototype facilities is an integral part of the nuclear program. A program has been developed and implemented to bring the facilities to a safe-storage mode as the initial stage of decommissioning. Currently, the Gentilly 1 and Douglas Point prototype reactors are on a safekeeping basis. After 25 years of service, decommissioning of the Nuclear Power Demonstration prototype reactor commenced in 1988. Completion of the initial stage of this decommissioning is estimated to cost $13.9 million over the next two years.

The closure of the heavy water plants at Glace Bay and Port Hawkesbury commenced July 1985 and was completed during the year.

Future net costs related to decommissioning nuclear facilities beyond the safe-storage mode cannot be quantified at this time due to the uncertainty as to the exact nature, timing and ultimate disposal alternatives. In accordance with the corporation's accounting policy, any such costs will be expensed when incurred.

Notes to the Financial Statements

8. Long-term debt

	1988	1987
	(thousands of dollars)	
Loans from Government of Canada		
To finance provincial utility nuclear facilities, maturing through 2008 at fixed interest rates varying from 6.687% to 9.706% (refer to Note 5 for related receivables).	$ 575,678	$ 599,582
To finance leased heavy water and other assets, maturing through 2003 at fixed interest rates varying from 4.125% to 10%.	24,854	25,964
Loans from third parties		
To finance the purchase of the Glace Bay heavy water plant, maturing through 1998 at an imputed interest rate of 8.875%.	22,014	23,352
	622,546	648,898
Current portion	28,214	26,353
	$ 594,332	$ 622,545

Loan repayments required over succeeding years are as follows (millions of dollars): 1989 – $28.2; 1990 – $30.3; 1991 – $32.9; 1992 – $55.1; 1993 – $32.1; and subsequent to 1993 – $443.9.

9. Related party transactions

In addition to the transactions disclosed elsewhere in these financial statements, the corporation had the following transactions with the Government of Canada:

	1988	1987
	(thousands of dollars)	
Repayment of loans and interest	$ 84,538	$ 81,358
Payments to the Public Service Superannuation Plan	$ 12,555	$ 12,748

In the normal course of business, the corporation also enters into various transactions with the Government of Canada, its agencies and other Crown corporations.

10. Contingencies

Certain claims against the corporation have arisen in the course of its medical products business and were pending at March 31, 1988. In the opinion of management adequate provision for these matters has been made in the financial statements.

11. Privatization

In a statement dated March 4, 1988, the Government of Canada announced its intention to privatize the Radiochemical Company and the Medical Products Division, both operating divisions of the corporation. The terms, conditions and timing of these transactions have not yet been determined.

12. Comparative figures

Certain reclassifications have been made to the 1987 comparative figures to conform with the current year's presentation.

Notes to the Financial Statements

13. Supplementary information

Incorporation

Pursuant to the authority and powers of the Minister of Energy, Mines and Resources under the Atomic Energy Control Act, the corporation was incorporated in 1952 under the provisions of the Canada Corporations Act (and continued in 1977 under the provisions of the Canada Business Corporations Act) to develop the utilization of atomic energy for peaceful purposes.

The corporation is a Schedule C Part I Crown corporation under the Financial Administration Act. The corporation is exempt from income taxes.

Operations

The operations of the corporation are reported in the Statement of Income as commercial operations, research and development operations, and discontinued operations.

Commercial operations consist of nuclear power engineering and design, project management, operating plant support services, manufacturing and selling of medical and industrial radiation equipment and radioisotopes, and investments.

Research and development operations consist of basic and applied nuclear research and development, and contract research and development services.

Discontinued operations consist of placing and maintaining prototype reactors in a safe storage mode as the initial stage of decommissioning, as well as the activities associated with closure and protection of the heavy water plants at Glace Bay, Port Hawkesbury and LaPrade.

Insurance

Historically, the corporation has assumed substantially all risks pertaining to the assets and operations of research and development, and prototype reactors. Effective May 1, 1988, these assets, except for decommissioned prototype reactors, are insured for conventional risks.

Commercial assets and operations, as well as heavy water inventories, are insured to the extent considered appropriate.

Sales Agents' Remuneration

Guidelines concerning the commercial practices of Crown corporations require disclosure of sales agents and the total remuneration paid to them during the year.

Remuneration and expenses paid to the following sales agents and representatives in 1988, primarily with respect to commercial operations, aggregated $2.4 million (1987 – $2.0 million):

B.C. Park, U.S.A.; Bio Nuclear Diagnostica Industria E. Comercio Ltda., Brazil; Costa Rica Dental and Medical Supply Company, Costa Rica; Eastronics Limited, Israel; Equipo Para Hospitales, S.A., Mexico; General Machinery Company Ltda., Chile; Korea General Trading Corporation, Republic of South Korea; Kostas Karayannis, S.A., Greece; Marubeni Corporation, Japan; Medtel Pty Limited, N.S.W. Australia; Novelait (Medical) Limited, Hong Kong; Promed International, S.A., Panama; Spring Port Taiwan Limited, Taiwan; PII-PED International Inc., U.S.A.; P.T. Sanga Kencana International, Indonesia; Radiotherapy & Medical Systems Pty Ltd., Australia; Societa Lombarda Di Televisione s.r.l., Italy; Sumta Inc., Turkey; Tamathe s.r.l., Argentina; Tareq Company, Kuwait; Zelin Limited, Pakistan.

Five-Year Financial Summary

	1988	1987	1986	1985	1984
	(millions of dollars)				
Operations					
Commercial revenue:					
Nuclear supply and services	**94**	97	93	146	196
Radiation equipment and isotopes	**125**	111	93	83	80
Investment	**—**	—	—	—	16
Interest	**70**	69	74	80	78
	289	277	260	309	370
Operating profit	**32**	22	28	8	15
Net income	**10**	17	17	10	9
Research and development operations	**243**	233	212	224	211
Financial Position					
Cash and short-term deposits	**60**	58	55	123	121
Long-term receivables	**568**	597	699	748	767
Investment and deferred costs	**106**	108	110	112	104
Capital expenditures	**26**	28	23	30	35
Property, plant and equipment	**50**	54	52	55	54
Total assets	**1,036**	1,018	1,107	1,226	1,285
Long-term debt	**594**	623	649	722	781
Shareholder's equity	**207**	196	177	148	143
Other					
Parliamentary appropriations	**175**	218	275	326	336
Export revenues	**179**	150	141	145	195
Number of employees	**4,892**	5,007	5,540	6,767	6,978

The Board of Directors

*†‡ **B.A. Bénéteau,** B.Sc.,
Chairman of the Board

*† **James Donnelly,** A.R.T.C.,
President and Chief Executive Officer

M.C. Burns, B.A.,
Principal,
The Sentinel Group

*† **L.J. Celeste,** B.Sc.E.E.,
President and Chief Executive Officer,
The New Brunswick Telephone Co. Ltd.

L.C. DeGroot B.Sc.Mech.,
P.Eng.,D.B.Adm.,
President,
Confedco Inc.

P.H. Harris, Q.C.,B.Adm.,LL.B.,
Partner,
Perry & Outerbridge

* **L. Martin,** B.A.,LL.L.,
Partner,
Clarkson, Tétrault

‡ **M. Paikin,** B.A.,LL.D.

‡ **K. Rao,** M.D.,F.R.C.P.,
Diagnostic Radiologist,
Associated Radiologists of Saskatoon

†‡ **I.S. Ross,** P.Eng.,
C.Eng.(U.K.),M.C.I.T.,
Consulting Engineer

* **J.L. Schlosser,** C.M.,LL.D.,
President,
Tri-Jay Investments

D.R. Sellen, B.A.,LL.L.,
Senior Partner,
Deeley, Fabbri, Sellen

J.J. Vacchino, M.El.,
President,
Vacchino Holdings Ltd.

* **Committee on Executive Management and Compensation**

† **Executive Committee**

‡ **Audit Comittee**

Officers

Executive

B.A. Bénéteau, B.Sc.,
Chairman of the Board

James Donnelly, A.R.T.C.,
President and Chief Executive Officer

P.R. Cote, B.Sc.,M.Sc.,Ph.D.,
Corporate Vice-President, Special Projects

D.G. Cuthbertson, C.A.,
Corporate Vice-President, Finance and Chief Financial Officer

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